# भारतीय मानक Indian Standard

वस्त्रादि — करघों के लिए पिकर्स — विशिष्टि

IS 8545: 2023

(पहला पुनरीक्षण)

Textiles — Loom Pickers — Specification

(First Revision)

ICS 59.120.30

© BIS 2023



भारतीय मानक ब्यूरो BUREAU OF INDIAN STANDARDS मानक भवन, 9 बहादुर शाह ज़फर मार्ग, नई दिल्ली - 110002 MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI - 110002

www.bis.gov.in www.standardsbis.in

#### **FOREWORD**

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Textile Machinery and Accessories Sectional Committee had been approved by the Textiles Division Council.

Picker is used to drive the shuttle from one box to another. While entering the box it also sustains the force of the shuttle.

This standard was originally published in 1977. The standard has again been revised to incorporate the following changes:

- a) References to Indian Standards have been updated; and
- b) Marking clause has been modified.

The composition of the Committee responsible for the formulation of this standard is given in Annex B.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2:2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

## Indian Standard

## TEXTILES — LOOM PICKERS — SPECIFICATION

(First Revision)

## 1 SCOPE

This standard covers tolerance on dimensions and mass and requirements for workmanship, finish, etc, of loom pickers made of leather, rawhide, synthetic rubber, plastics, etc.

#### 2 REFERENCES

The standards listed in Annex A contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of these standards.

## 3 MATERIAL

## 3.1 Raw-Hide or Leather Pickers

- **3.1.1** Only fully seasoned (natural/vacuum impregnated in sperm oil), stout and heavy buffalo hide-free from sun burns, putrefaction, etc should be used.
- **3.1.2** The chemicals used for dehairing shall not impair the strength of hide.

## **4 DIMENSIONS AND MASS**

- **4.1** The mass, length, width, thickness, slot width or spindle hole, diameter, etc, shall be as given in IS 1906 unless otherwise specified in the contract.
- **4.2** The following tolerances shall be applicable to the dimensions and mass of the picker:

Sl No.	Characteristics	Underpick Loom Picker	Overpick Loom Picker
(1)	(2)	(3)	(4)
i)	Overall length, width and thickness (to the nearest 0.1 mm)	+ 0 - 2 percent	± 5 percent
ii)	Slot width, mm	+ 0 - 2 percent	_
iii)	Spindle hole diameter	_	Clearance of $+1.0$ mm over the corresponding spindle diameter
iv)	Mass (to the nearest gram)	± 4 percent	± 5 percent

## **5 WORKMANSHIP AND FINISH**

- **5.1** At slots, edges, corners and exposed surfaces, the picker should be free from sharp edges and rough surfaces.
- **5.2** The fasteners (staples, rivets, beyond the surface of picker etc) should not unnecessarily protrude beyond the surface of picker.
- **5.3** No interlayer interstices shall be permitted.
- **5.4** The overpick loom picker shall freely slide on

the smooth, polished and straight spindle (*see* IS 7043) of the corresponding diameter. The spindle holes shall be coaxial.

NOTE — To ensure better performance of 4B pickers oval shape may be provided at shuttle tip and striking point in the case of all pickers, and also at spindle bole in the case of leather and raw-hide pickers only.

#### 6 SAMPLING

**6.1** A lot shall consist of all the pickers in a consignment made of same material and having same nominal dimensions, shape, mass, etc.

## IS 8545: 2023

## 6.2 Sampling Plan

The sample size and acceptance number depending upon the lot size shall be as follows unless otherwise specified:

Sl No.	Lot Size	Sample Size	Acceptance No. (Permissible No. of Defectives)
(1)	(2)	(3)	(4)
i)	Up to 100	8	0
ii)	101 to 150	13	1
iii)	151 to 300	20	2
iv)	301 to 500	32	3
v)	501 to 1 000	50	5
vi)	Above 1 000	80	7

## 7 MARKING

**7.1** Each package or picker (as applicable) shall have the following information suitably marked:

- a) Type of picker;
- b) Length (mm), width (mm), thickness (mm) and mass (g);
- c) Spindle hole (mm) (in case of overpick loom pickers) or slot width (mm) (in case of under pick loom pickers);
- d) Side of the picker to be used first;
- e) Name or trade-mark of the manufacturer; and
- f) Number of pickers in the package.

## 7.2 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act*, 2016 and the Rules and Regulations framed thereunder, and the products may be marked with the Standard Mark.

## 8 PACKING

The pickers shall be packed in a suitable package as detailed in the contract.

## ANNEX A

(Clause 2)

## LIST OF REFERRED STANDARDS

IS No. Title

IS 1906: 2023 Recommendation for shape and dimensions of 4B picker (third revision)

IS 7043: 1973 Specification for loom (fly) spindles

IS 8545: 2023

#### ANNEX B

(Foreword)

#### COMMITTEE COMPOSITION

Textile Machinery and Accessories Sectional Committee, TXD 14

Organization Representative(s)

Central Manufacturing Technology Institute, Bengaluru DR NAGAHANUMAIAN (Chairperson)

Amritlakshmi Machine Works, Mumbai Shri N. K. Brahmachari

SHRI N. K. RAUT (Alternate)

ATE Enterprises Private Limited, New Delhi Shri Abhijit Kulkarni

SHRI ANIL KUMAR SHARMA (Alternate)

Bajaj Industries Private Limited, Kolkata REPRESENTATIVE

Bhowmick Calculator, Kolkata Shri Goutam Bhowmick

SHRI VIVEKANANDA BHOWMICK (Alternate)

Central Manufacturing Technology Institute, Bengaluru SHRI B. R. MOHANRAJ

SHRI K. SARAVANAN (Alternate)

Confederation of Indian Textile Industry, New Delhi SHRI AJAY KUMAR

Dashmesh Jacquard and Powerloom Private Limited, Panipat Shri RAJMEET DHAMMU (Representative)

HLL Lifecare Limited, Noida Shri Akhil G. S.

SHRI RATNAKAR GUPTA (Alternate)

ICAR-Central Institute for Research on Cotton Technology,

Mumbai

DR N. SHANMUGAM

DR T. SENTHILKUMAR (Alternate)

India ITME Society, Mumbai Shri Prashant Mangukia

SHRIMATI SEEMA SRIVASTAVA (Alternate)

Indian Jute Industries Research Association, Kolkata Shrimati Saumita Choudhury

 ${\tt SHRI\,PARTHA\,SANYAL\,}(Alternate)$ 

Indian Jute Mils Association, Kolkata REPRESENTATIVE

Indian Textile Accessories and Machinery Manufacturers St

Association, Mumbai

SHRI N. D. MHATRE

SHRI CHANDRESH SHAH (Alternate)

Inspiron Engineering Private Limited, Ahmedabad Shri Sanjay Kowarkar

SHRI ANKUR SONI (Alternate)

JCB Industries, Guwahati Shri Dhruba Sarma

SHRI ABHIJIT BHUYAN (Alternate)

Kusters Calico Machinery Limited, Karjan Shri Devang Parikh

SHRI SHUBHASIS SUR (Alternate)

Lakshmi Machine Works Limited, Coimbatore MS KALPANA A.

MS DIVYA V. (*Alternate*)

Laxmi Shuttleless Looms Private Limited, Ahmedabad Shri Ketan Sanghvi

Ludlow Jute Limited, Kolkata REPRESENTATIVE

Organization

Representative(s)

Ministry of Heavy Industries and Public Enterprises, Department

of Heavy Industry, New Delhi

SHRI SANJEEV GUPTA

SHRI S. SUNDAR (*Alternate*)

National Safety Council, Navi Mumbai

SHRI LALIT R. GABHANE

Office of the Textile Commissioner, Mumbai

SHRI C. R. KALESAN
SHRI JAGRAM MEENA (Alternate)

SHRI R. R. DEOGHARE (Alternate)

Peass Industrial Engineers Private Limited, Navari

SHRI RAVI S. RAO

SHRI JIGNESH B. PATEL (Alternate)

Technocraft Industries India Limited, Mumbai

SHRI RAVINDER KUMAR

SHRI DURADUNDESHWAR HIREMATH (Alternate)

Textile Machinery Manufacturers Association, Mumbai

SHRI M. SHANKAR
SHRI PRASHANT MANGUKIA (Alternate)

The Bombay Textile Research Association, Mumbai

SHRI VIJAY GAWDE

SHRI R. A. SHAIKH (*Alternate*)

The Synthetic and Art Silk Mills Research Association, Mumbai

DR MANISHA MATHUR

SHRI SANJAY SAINI (Alternate)

The Textile Association (India), Mumbai

SHRI J. B. SOMA

SHRI ASHOK JUNEJA (Alternate)

Truetzschler India Private Limited, Ahmedabad

SHRI PRAVIN KANDGE

Shri Shiladitya Joshi (Alternate)

United Nations International Children's Emergency Fund,

New Delhi

DR PRATIBHA SINGH

SHRI YUSUF KABIR (Alternate)

Veermata Jijabai Technological Institute, Mumbai

DR SURANJANA GANGOPADHYAY SHRI S. P. BORKAR (Alternate)

BIS Directorate General

SHRI J. K. GUPTA, SCIENTIST 'E'/DIRECTOR AND HEAD (TEXTILES) [REPRESENTING DIRECTOR

GENERAL (*Ex-officio*)]

Member Secretary
Shri Swapnil
Scientist 'B'/Assistant Director
(Textiles), BIS

This Pade has been Intentionally left blank

#### **Bureau of Indian Standards**

BIS is a statutory institution established under the *Bureau of Indian Standards Act*, 2016 to promote harmonious development of the activities of standardization, marking and quality certification of goods and attending to connected matters in the country.

## Copyright

BIS has the copyright of all its publications. No part of these publications may be reproduced in any form without the prior permission in writing of BIS. This does not preclude the free use, in the course of implementing the standard, of necessary details, such as symbols and sizes, type or grade designations. Enquiries relating to copyright be addressed to the Head (Publication & Sales), BIS.

## **Review of Indian Standards**

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the website-www.bis.gov.in or www.standardsbis.in.

This Indian Standard has been developed from Doc No.: TXD 14 (22389).

## **Amendments Issued Since Publication**

Amend No.	Date of Issue	Text Affected	

## **BUREAU OF INDIAN STANDARDS**

## **Headquarters:**

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002

Telephones: 2323 0131, 2323 3375, 2323 9402 Website: www.bis.gov.in

_		
Regional Offices:		
Central	: 601/A, Konnectus Tower -1, 6 <sup>th</sup> Floor, DMRC Building, Bhavbhuti Marg, New Delhi 110002	2323 7617
Eastern	: 8 <sup>th</sup> Floor, Plot No 7/7 & 7/8, CP Block, Sector V, Salt Lake, Kolkata, West Bengal 700091	2367 0012 2320 9474
Northern	: Plot No. 4-A, Sector 27-B, Madhya Marg, Chandigarh 160019	{ 265 9930
Southern	: C.I.T. Campus, IV Cross Road, Taramani, Chennai 600113	{ 2254 1442 2254 1216
Western	: Plot No. E-9, Road No8, MIDC, Andheri (East), Mumbai 400093	{ 2821 8093

Branches: AHMEDABAD. BENGALURU. BHOPAL. BHUBANESHWAR. CHANDIGARH. CHENNAI. COIMBATORE. DEHRADUN. DELHI. FARIDABAD. GHAZIABAD. GUWAHATI. HIMACHAL PRADESH. HUBLI. HYDERABAD. JAIPUR. JAMMU & KASHMIR. JAMSHEDPUR. KOCHI. KOLKATA. LUCKNOW. MADURAI. MUMBAI. NAGPUR. NOIDA. PANIPAT. PATNA. PUNE. RAIPUR. RAJKOT. SURAT. VISAKHAPATNAM.